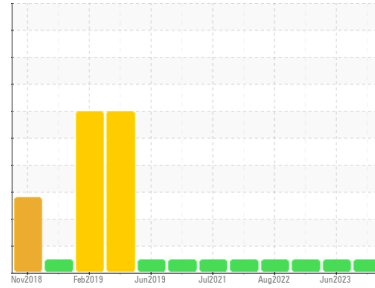




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**801109**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0084284</b>	GFL0077637	GFL0063779
Sample Date	Client Info		<b>17 Jul 2023</b>	21 Jun 2023	29 Dec 2022
Machine Age	kms	Client Info	<b>231444</b>	10249	9611
Oil Age	kms	Client Info	<b>0</b>	0	571
Oil Changed	Client Info		<b>N/A</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	<b>11</b>	53	33
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>2</b>	8	10
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>1</b>	3	2
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	1	<b>2</b>	2	4
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>57</b>	59	59
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>967</b>	953	942
Calcium	ppm	ASTM D5185(m)	1070	<b>1038</b>	1104	1077
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1076</b>	1029	1037
Zinc	ppm	ASTM D5185(m)	1270	<b>1193</b>	1205	1177
Sulfur	ppm	ASTM D5185(m)	2060	<b>2576</b>	2264	2372
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

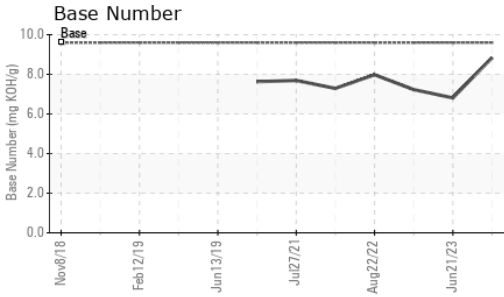
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	9	8
Sodium	ppm	ASTM D5185(m)		<b>5</b>	10	7
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	3	3

## INFRA-RED

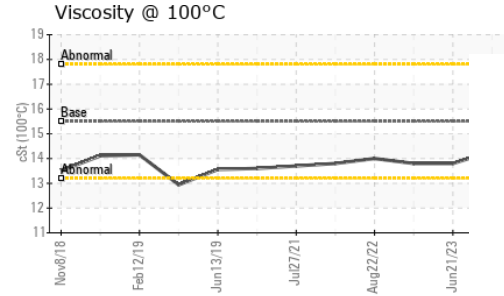
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0.9	0.8
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.0</b>	10.6	10.5
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>20.2</b>	23.9	23.1



# OIL ANALYSIS REPORT



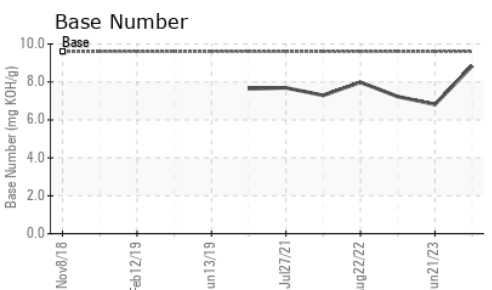
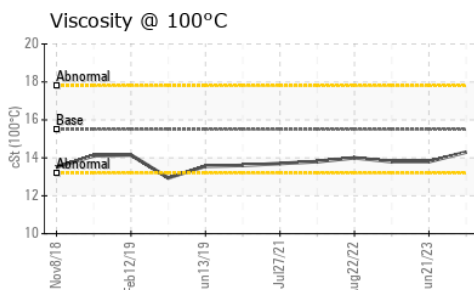
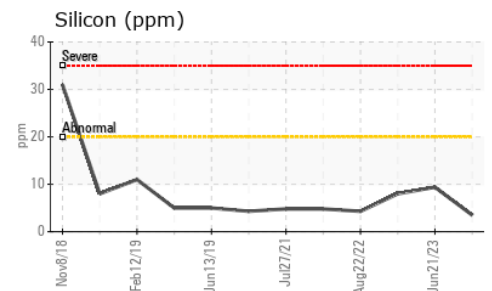
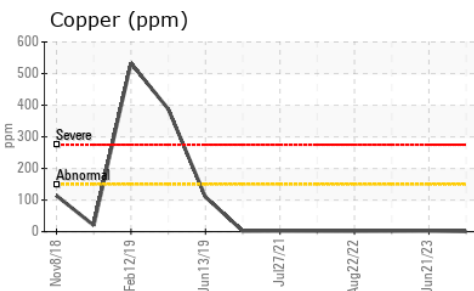
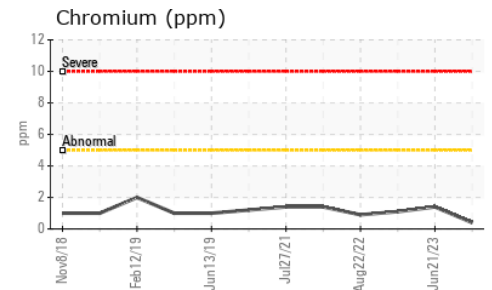
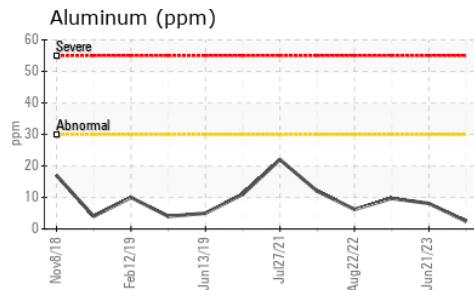
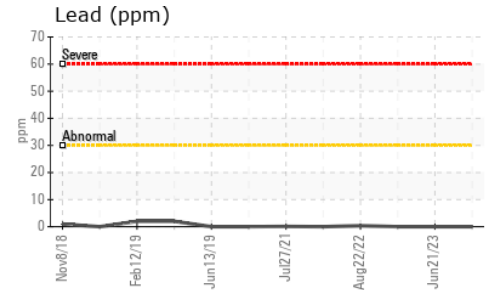
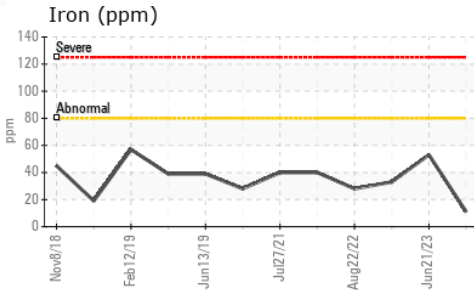
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.9</b>	21.1	19.3
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	<b>8.84</b>	6.81	7.23



VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	<b>14.3</b>	13.8	13.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County  
**Sample No.** : GFL0084284 **Received** : 24 Jul 2023  
**Lab Number** : 02571636 **Diagnosed** : 25 Jul 2023  
**Unique Number** : 5616687 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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